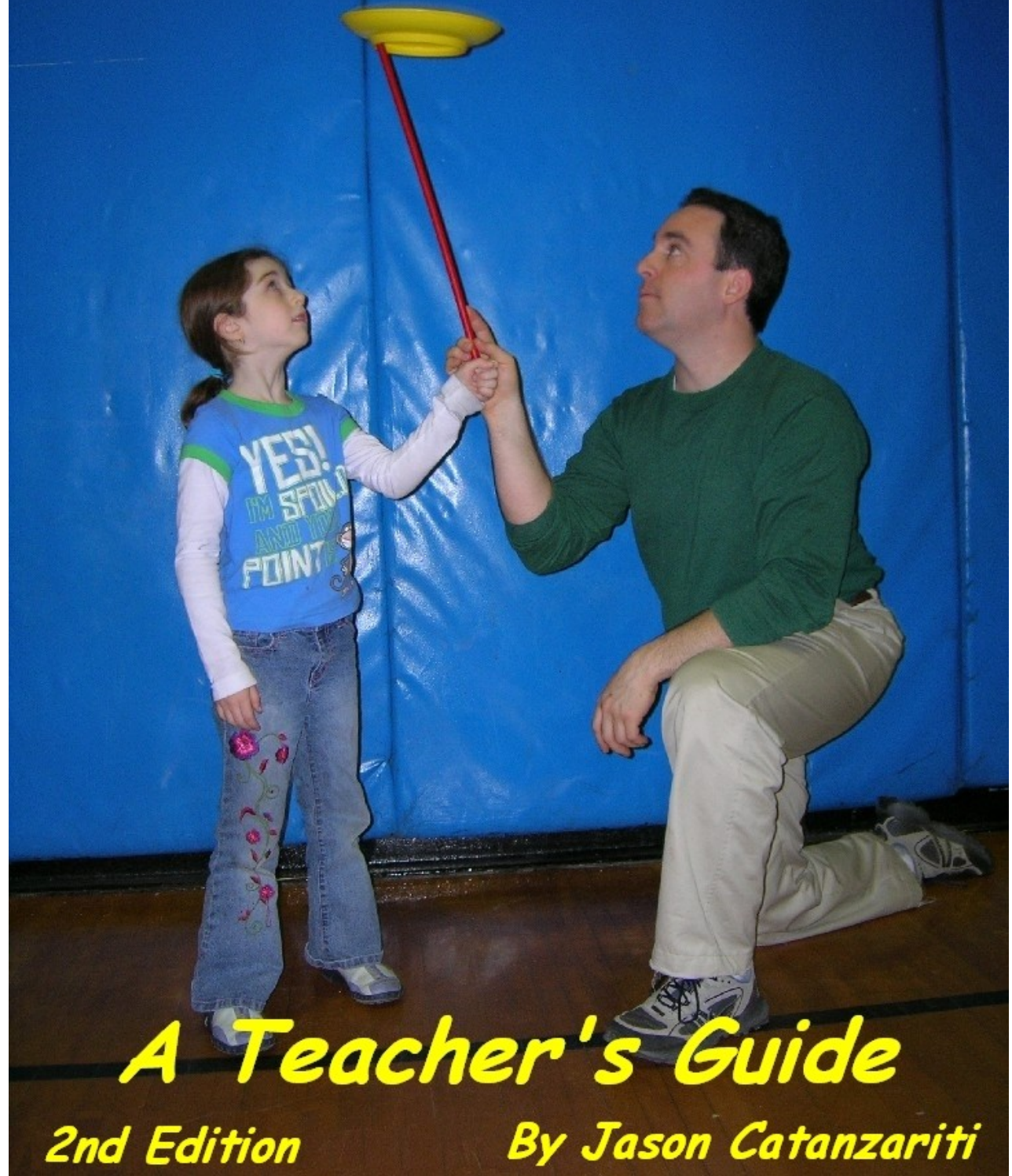


# *Circus Arts*



## *A Teacher's Guide*

*2nd Edition* *By Jason Catanzariti*

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## INTRODUCTION

Welcome to the second edition of *Circus Arts – A Teacher's Guide*. The purpose of this book is to provide teachers with the information they need to effectively give instruction in circus skills in a Physical Education, classroom, or recreational setting.

Besides some minor editing of the text, the second edition differs from the first in two respects. First, it now includes photos to provide clear examples of the skills. And second, it has been published electronically. The choice to bypass traditional print media allows easier distribution at much lower cost.

It should be noted that the skills presented in this book are not hazardous “daredevil” stunts. Rather, they are manipulative skills such as juggling and plate spinning. Although chapter six includes unicycles, balance boards and stilts, these skills are a far cry from the flying trapeze. The activities presented here can be taught with simple equipment, and with little or no risk to safety.

Circus arts are thought to benefit students in several ways. Juggling and related activities such as devil sticks, spinning plates, and diabolos are challenging manipulative skills which rely upon eye/hand coordination, rhythm, fine and gross motor control, and accurate throwing and catching for success. Unicycling and stilt walking require the development of novel kinesthetic skills to maintain balance. However, the dedication to meaningful practice and the personal sense of achievement which students often acquire through participation in these non-competitive skills may be the most important benefit of all.

Circus arts are especially useful to Physical Education teachers for a number of reasons. They are non-competitive activities in which most students have a common starting point - that of a beginner. Students who shy away from competitive athletics often find circus skills to be an enjoyable activity in which they can experience success. Circus arts often create an environment conducive to individual achievement, as well as group support for individuals.

Circus skills are appropriate activities at the elementary and secondary levels, and there is no limit to skill development. Tracking student outcomes can be done very simply, such as by counting throws in juggling. In this way circus skills provide an ideal opportunity for authentic assessment of student learning and performance. Finally, circus skills are convenient in terms of equipment setup and preparation. As when teaching rope jumping, students can pick up equipment as they enter the gym and immediately begin meaningful activity.

Physical Education teachers often present juggling and other circus skills as a traditional unit of one to three weeks. Some teachers also return to circus skills throughout the school year in order to provide a break from routine, and to allow for skill development over an extended period of time. Classroom teachers make use of juggling as a “rainy day” activity, both in the classroom and at recess. Juggling with light-weight scarves is especially popular in the classroom because of safety, and because it can be done with limited space. Brief “juggling breaks” interspersed between work periods can be an enjoyable activity which refocuses students and teachers.

Presenting a student circus is a popular school project. These programs are often interdisciplinary in nature by involving teachers from different subject areas in various facets of the performance.

This book will help teachers gain proficiency in circus skills, thereby improving the quality of their instruction. It should be noted however, that expertise in each skill by the teacher is not necessary to teach circus arts effectively in a school setting. A number of highly successful programs have been initiated by teachers with little or no skill in juggling or other circus arts. Have confidence – you can do it!

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**[www.teachcircus.com](http://www.teachcircus.com)**

## FORMAT OF INSTRUCTIONAL TEXT

In addition to normal text intended for the teacher, two other types will be indicated with visual icons:



Verbal instructions to the student. This text can be used as a script by the teacher.



Safety warnings. This icon is used only for particularly crucial issues concerning student safety.

# **CHAPTER I**

## **JUGGLING WITH SCARVES**





What is juggling? One definition is, "keeping several objects in motion in the air at the same time." Some jugglers will say it is the act of keeping more objects in the air than you have hands.

A more broad definition would be the skillful and/or novel manipulation of one or more objects. This is the more useful definition for educational purposes. Young children who are handling only one or two scarves often perform skillful manipulations for their stage of development, so why not call it juggling?

What are the benefits of juggling? Whatever a person's movement background, he or she can learn something from juggling. It is an ideal Physical Education and classroom activity that targets all three educational domains:

Psychomotor: Juggling is a skill that requires timing, hand-eye coordination, and throwing and catching skills. These encompass both gross and fine motor coordination.

Cognitive: To succeed in juggling students must understand the pattern, imagine and focus on a target for their throws, and comprehend the rhythmic cycle of throws.

Affective: Juggling is an excellent task for teaching goal setting, tracking of improvement, perseverance, delay of gratification, and cooperation with partners.

Should your students juggle with balls or scarves? Scarf juggling is an excellent activity at any level - scarves are slow moving, and success is virtually guaranteed. At the primary level, scarves are a fun introduction to juggling skills and other types of movement.

Although juggling scarves are useful tools for elementary level teachers, they may not be the most appropriate lead-up to ball juggling. Educators have traditionally used scarves to help students “get the idea” of juggling before allowing them to try with balls. However, there is evidence that this may not be the best strategy for learning ball juggling.

Research suggests that ball juggling is very task-specific (Beek & van Santvoord, 1992). That is, the best way to learn to juggle balls is to actually juggle with balls. Scarves move so slowly that they do not simulate the “real-time” speed of balls or beanbags. A study comparing juggling skill acquisition with balls and scarves showed that learning to juggle with scarves did not result in faster or more effective learning of ball juggling (Hautala, 1988).

This is not to say that scarf juggling is harmful to students who hope to juggle with balls. Scarves may assist students in understanding juggling patterns (Hautala, 1985), and does not appear to hinder the development of ball juggling skills. Scarf juggling is an enjoyable activity, and should be included in any educational circus arts instruction.

## **DEVELOPMENTAL LEVELS**

Children in fourth grade and up are usually capable of learning to juggle with balls or beanbags, and they should use them. Sometimes when they learn with scarves first, balls seem more difficult later. However, this is not to say that scarves should not be allowed. Although it is preferable for them to learn with balls, any students who become too frustrated should be given scarves.

At the middle and high school levels, it is a good policy to use balls for the first few sessions. After gaining some success with balls, scarves can then be presented as another form of juggling.

Children in grades K-2 should be taught with scarves, as they do not usually have the tracking and coordination skills necessary for ball juggling. Because they exhibit characteristics of both younger and older children, third graders can be taught with either scarves or balls, or both.

Again, it should be noted that scarf juggling need not be thought of as a necessary lead-up to ball juggling. For grades K-2, scarves are an excellent activity in and of themselves.

# ONE SCARF

(Grades K-2)

Moving the Scarves: This sequence allows students to explore how the scarves move, and learn to move them in relation to their bodies.



Hold the scarf with your fingertips in two hands. Wave it up and down in front of you as **SLOWLY** as you can. Bend your knees as it floats all the way down to the ground.



Wave your scarf at a low level. At a high level. Wave your scarf behind you. Wave it underneath you.



Wave your scarf on the side of your body. On the other side. Slowly switch back and forth, wiggle your hips, and do a hula dance!



Wave the scarf up and down in front of you. Wave it fast. Now slow. Wave the scarf in a big circle. Now stop and make the circle go in the other direction.

Throwing & Catching: This sequence teaches students to release and re-grasp the scarves.



Hold the scarf with your fingertips. **PULL** it up as high up as you can and let go. Let it float down and catch it. Try to bring the scarf up as high as you can before you let go.



Try to throw, clap your hands, and catch. How many times can you clap before you catch? Can you throw and catch without moving your feet?



Hold the scarf with one hand. Put your empty hand behind your back. Throw the scarf and catch with just one hand. Try the same thing with the other hand

Encourage students to PULL the scarves up and then let go. Children will sometimes jump and throw with fast, jerky motions in an attempt to get more height. Point out that they can throw higher with a smooth pull that is released up high.

### Body Catches



Throw the scarf up and catch it on your head.



Catch the scarf on your elbows, shoulders, stomach, back.



Throw the scarf up and wait. Just before it hits the ground, stick out your foot to catch!

Be sure to “sell” each of these moves as spectacular juggling tricks!



### The Rainbow Throw



Hold both hands at waist level, with the scarf in one hand. Throw it up and then catch with your other hand. Every time you throw the scarf, your other hand makes the catch.

Students will often hand the scarf back to their first hand before throwing again. Encourage throwing with each hand in turn.

## TWO SCARVES

(Grades K-2)

### The Number 11



Wave both scarves up and down in front of you, one at a time. Wave them slowly. What number are they drawing?



Now let go of the scarves one at a time as you wave them. One hand throws and catches, then the other hand. This draws the number 11 in the air. The scarves don't change hands – they go up and down in their own “columns”.



### The Circle

Some educators feel it is important to prevent students from juggling in a circle since “cascade” juggling with three objects is not done in a circular motion. However, most students will naturally juggle the two scarves in a circle. By teaching this step and pointing out how it is different, students will learn to distinguish between the circle and cascade-style crossed throws.



Hold one scarf in each hand. Throw one up, hand the other one across to your other hand, and then catch. Throw, hand, catch.

When students are comfortable with the circle, have them stop and switch directions so their other hand becomes the throwing hand. When students can make circles in both directions, have them do three one way, then three the other way, and repeat.

After students have become comfortable juggling in circles, challenge them with some of these fancy tricks:



Throw, hand a scarf under your leg, and catch.



Throw, hand behind your back, and catch.



Throw, hand across, spin yourself around, and catch.



Jump up and down while juggling in the circle.



Sit down and stand up again while juggling in the circle.



Begin your circle, then close your eyes and try to continue without looking!



Invent your own combinations. Example: “Throw, hand under the leg, then behind the back, and catch.”



The “X”: This step introduces the crossed throws necessary for three-object juggling. The first step will be to trace the shape in the air. Emphasize slow movements for understanding.



Hold one scarf in each hand. Put one hand on your belly button, and then slide it up across your body, across your other shoulder, and across your face until your arm is straight. Put that hand down. Now with the other hand (repeat).



Without touching your body, move each scarf across your body and hold it up in the air one at a time. What shape does this draw in the air?



**SLOWLY** throw the scarves in the X shape, and let them drop to the floor. Two throws, but no catches. The scarves should have switched sides. **THROW, THROW, DROP, DROP.**



**SLOWLY** make three throws in the X shape and try to catch them. **THROW, THROW, CATCH, CATCH.**

Move around the area giving feedback on this step in particular. Many students will hand the scarves across (in the circle pattern) rather than crossing them in the X shape.





## THREE SCARVES

(Grades K-2)

Holding Two Scarves in One Hand (“The Pincher”): This is a necessary skill for juggling three scarves, and should be mastered before attempting three.



Make a fist around one scarf. Then make a pincher out of your thumb and index finger. Hold the second scarf in the pincher. Practice throwing just the “pincher scarf” without releasing the other.



Juggling Three Scarves: This is the “Basic Cascade” which can also be used with balls, rings, or clubs. Remind students to go slowly, that their hands should take turns, and that they are still throwing across as in the X.



Make a Pincher with two scarves and hold the third in your other hand. Throw with the Pincher first, then the other hand to make an X. Then throw the third scarf. Throw all three scarves, even if you drop them!

Many students will hand across instead of throwing. They may also need reminders to throw from the Pincher first.



## OTHER SCARF ACTIVITIES

The following activities are not circus skills per se, but may be useful as lead-ups, or changes of pace.

Circle Toss: The whole class stands in a circle with each person holding one scarf. On the teacher's signal everyone throws their scarf straight up, and then moves over one space to the right to catch the scarf that comes down there.

- Try doing several throws consecutively.
- Have everyone move TWO spaces at a time.

Partner Scarf Tag: Each person gets a partner, one of whom tucks a scarf into a pocket or waistband so it hangs out behind him. The other partner chases him and tries to steal the scarf, and they switch roles. Vary the rules according to your favorite tag game.



Turkey Tag: Give students three scarves to hang from their waistbands or pockets. The object of the game is to snatch other people's "feathers" while protecting your own.



Protect your scarves by moving, not with your hands. If all of your scarves are stolen, put your hand up and someone who has extras will come to give you some. If you have extra scarves, give a few to a person who is raising their hand.

## **CHAPTER II**

### **JUGGLING WITH BALLS & BEANBAGS**



## WHAT THE RESEARCH SAYS

Research has shown that the most important factor in learning to juggle is the amount of time spent in practice (Hautala, 1988). Beanbags are best for maximizing student learning time because they do not bounce away when dropped. This eliminates time wasted on retrieval, and helps ensure others won't trip on them. However, beanbags are comparatively expensive and may break. If beanbags are not available, tennis balls are a cheap alternative. Used balls can often be obtained from tennis facilities at little or no cost.

Other research suggests that timing is the most crucial physical component of juggling (Beek & van Santvoord, 1992). For this reason, it may help to have students focus on the timing of their throws, and not pay so much attention to catches.

Tracking progress is important to the teacher and student, so encourage the children to count their throws. By keeping track of the number of successful throws they can make, students can formulate personal goals and maintain motivation for continued practice.

Some steps in the following progression include a section on troubleshooting common problems associated with each step. Notice that the juggling progression begins with two balls instead of one. Since juggling is primarily a timing task, practicing with just one ball is not very useful. Anyone who can throw and catch one ball is ready to begin this progression.

Giving some thought to the practice area may help maximize learning. If possible, have students face a blank wall or other non-distracting visual background. However, jugglers shouldn't be too close to a wall either, because this may interfere with their throws.

To prevent distraction assign different areas of the room for different skills. For example, one corner is the ball juggling area, one wall is only for unicycle practice, etc. Don't allow students to interfere with others as they practice.

## TWO JUGGLING BALLS

(Grades 4 & up)

### Ready Position

Most sports have a characteristic “ready position”, and so does juggling. Teach students to prepare for juggling by assuming this position.



Feet shoulder width apart.



Relax your shoulders and hold your hands at waist height, with the palms up.



Look up, not down at your hands. Watch for the peaks of your tosses.



Relax, and don't worry if you drop.



## The X: Throwing and catching two balls.



Hold one juggling ball in each hand. Hold them above your head to see how high to throw. Imagine they are your targets.



Beginning from the Ready Position, throw the first ball up about a foot above your head. When it reaches the top, throw the second ball so it crosses under the first. The two throws make an X in the air.



Try to throw the balls the same height when doing the X. Don't worry if you can't catch them yet.



Students should not attempt continuous juggling at this stage. They should just make two throws and catches, and then stop. Be sure they understand that each ball changes sides - the ball thrown from the right hand is caught in the left, the ball thrown from the left is caught in the right.

It may also be helpful to have students throw but not catch. A good cue is, "Throw-throw, drop-drop." This allows them to concentrate on throwing without the pressure of having to catch.

## THREE-BALL JUGGLING!

“Flashing” 3 Balls: A “flash” means you throw and catch each object once. A successful flash of three balls would be three throws and three catches.



Begin in the Ready Position. Hold two juggling balls in one hand, and one in the other. The hand that has two must go first.



Using the same X-shape as before, throw all three balls **EVEN IF YOU DROP THEM**. Remember - if you don't throw them, you definitely won't catch them!

Strongly encourage students to get the balls out of their hands in turn. They must make all three throws. Cue: “It’s OK to drop!”

Continuous Juggling of Three Balls: When a student can flash three balls they must learn to continue throwing. When they can make more than three throws, they’re juggling!



Begin in the Ready Position with two juggling balls in one hand, and one in the other. Count your throws, and try to reach four, **EVEN IF YOU DROP**.

As soon as the students can make four throws in a row, tell them to continue practicing with the goal of making as many consecutive throws as they can. Have them count their throws to track progress.

This step is the real “A-Ha!” moment in learning to juggle. After reaching this point, students will often make quick progress toward 6-10 throws with three balls. Encourage them to make as many throws as possible, and set their own personal records by counting their throws. Present the goal of reaching 20 throws - the level of mastery!

When students can juggle continuously with some degree of comfort they can stop counting their throws and instead begin timing themselves for duration juggling!







## TROUBLESHOOTING BALL JUGGLING

Problem	Strategies
Student hands a ball across instead of throwing it	<p>This is the most common problem for beginners.</p> <p>Have the student begin with his NON-DOMINANT hand. Slowly throw without catching.</p> <p>Have the student exaggerate the slowness of the throws to illustrate what his hands should do.</p> <p>Throw slightly higher to gain more time.</p>
Student throws too low	<p>Have the student raise her hands above her head and look where they are: that is how high she should throw.</p>
Student makes uneven throws	<p>This is a timing problem caused by the student throwing the second ball too early or too late.</p> <p>Have the student focus his attention on throwing one ball at a time. Wait until the first ball reaches the top, then throw the second ball.</p> <p>Throw but don't catch. Sometimes the problem is that the student concentrates so much on catching that he doesn't think enough about throwing. Forget the catches – if the throws are good, the catches will eventually come.</p>

Problem	Strategies
Inaccurate throws	<p>Have the student slow down and focus on throwing one ball at a time, without concentrating on catches.</p> <p>Watch where the balls land to see if they are too far away.</p>
Student walks or runs while juggling	<p>Have the student put his feet on a line and attempt the skill without moving, even if he drops the balls. He should focus on throwing straight up and not away. If he still moves, try having him kneel while juggling</p> <p>Check to see that the student's palms are pointed up before they throw. Students who experience drift often have their hands facing forward. Have him relax his arms and shoulders and hold his hands at waist level with the palms up.</p>
Student is unable to catch	<p>Students sometimes make good throws, but are a little too late to catch. This is a “good problem”. With some practice, good throws will soon result in catches.</p> <p>Encourage the students to keep her eyes on the balls, concentrating on the peak of each throw.</p> <p>If balls are going sideways, tell the student to throw higher and more narrowly.</p>

<b>Problem</b>	<b>Strategies</b>
Student reaches up to catch the balls	Encourage keeping the hands near waist level. Cue: Throw high, catch low.
Student stops before making the fourth throw	<p>Tell her to forget about catching and to throw the fourth ball no matter what.</p> <p>Make sure she counts her throws so she knows when to throw the fourth ball.</p>
Inconsistency	Practice, practice, practice!

## **CHAPTER III**

### **JUGGLING TRICKS FOR INDIVIDUALS & GROUPS**



## **“I CAN JUGGLE... NOW WHAT?”**

Many teachers have found themselves without an answer when students who have learned to juggle three balls excitedly ask what to learn next. This section will hopefully answer that question, and keep such students engaged in meaningful learning for some time. The tricks listed in this section are intended for students who can complete at least 20 continuous throws with three objects.

Many of the tricks listed can also be done with juggling scarves, rings, or pins - especially those moves that are variations of patterns. Some tricks can only be done with bouncing balls, for which tennis balls will usually suffice. Tricks and activities for partners and groups are also included. These have a dual purpose - to challenge highly skilled students, and to allow less skillful students to partner with them.

### **SUGGESTIONS FOR TEACHING JUGGLING TRICKS**

Whenever possible, have students *begin juggling* with the trick in question. For example, a student wants to learn an under-the-leg throw: Have her make the first toss with an under-the-leg throw, and then continue juggling normally. This is easier than attempting the trick in “mid-juggle”.

Encourage students to learn all tricks with *both hands*. For example, when learning under-the-leg throws students should work on doing the move with both the right and left hands. This assures the non-dominant hand will gain some skill, and also will make other moves and combinations easier to learn later on.

Encourage persistent practice, and help students track their progress. A good way to accomplish both of these objectives is to have sign-up sheets for different skills and tricks. When students master a trick, they can then sign their names on the poster.

Don't be intimidated if you, the teacher, cannot demonstrate all the skills and tricks described in this section. Explaining them is often sufficient, and skillful students can also model tricks and moves for others. However, you may surprise yourself at how quickly you become comfortable demonstrating the skills as you gain experience.

Bounce Start: This is a good first trick for students to learn. It looks flashy, but is fairly simple to execute. It also starts the student on variations in timing, an essential aspect of many juggling moves.



Throw one ball very high. WAIT, and then begin juggling after it bounces up to you.



Throw the first ball high enough that it bounces up to at least chest height.

Encourage the student to wait for the bounced ball. She should not begin juggling until the bounced ball reaches the peak of its bounce.

### High Toss Start



This move is a Bounce Start without the bounce. Throw the first ball up quite high, WAIT and then begin juggling as it comes down.



The key is to wait for the first ball to come down to about head height before making the next throw.

Initiating Tricks in Mid-Juggle: A student who has learned the Bounce Start and the High Toss Start should now attempt to initiate each trick while already juggling.

The difficulty in this stage is deciding which ball to throw high, and this can be very confusing. It may help to give the student two balls of one color and one of another color. The student can then attempt to initiate the trick when the odd-colored ball reaches his dominant hand.

Under the Leg: Have the student begin with one ball for this move.



Practice throwing under your leg and up to about head height. Do this with each hand - right hand throwing under the right leg, and left hand under left leg. (Note: Some students may be more comfortable throwing under their opposite legs.)



With three balls, begin juggling with an under-the-leg throw. Do this with each hand.



Try an under-the-leg throw in “mid-juggle”.

Behind the Back: Follow the same steps as for under-the-leg. Although throwing behind the back is a more difficult move, the same progression is appropriate.



Begin with one ball. Throw and release it as far behind the back as possible. It should travel up over the opposite shoulder, and be caught in front. Try this with both hands.



With three, begin juggling with a behind-the back throw. Do this with each hand.



Try a behind-the-back throw in “mid-juggle”.

The Pirouette: A flashy and fun trick. Juggle three balls and throw one high. Spin around once, catch the high throw and continue juggling!



Begin with just one ball. Practice tossing high, spotting the ball at its peak, spinning yourself all the way around, spotting the ball on its way down, and catching.



With 3 balls or scarves: Toss one high, pirouette, and begin juggling.



Put it all together and go for it in “mid-juggle”!

Body Stops & Catches: There are a variety of tricks in which the juggler briefly stops when a ball or scarf is held somewhere on the body.



While juggling, use one hand to quickly put a ball or scarf under your chin. Hold the ball there for a moment, then drop it down and try to continue juggling.

Body stops and catches can also be done using the back of the knee, under the arms, the top of the head (using soft beanbags), on the back of the neck, and between the forearm and bicep.





## JUGGLING PATTERNS

Introducing new patterns before students have mastered the Basic Cascade can be confusing. The patterns in this section should be taught after students have solid control of the Basic Cascade.

### The 2 + 1



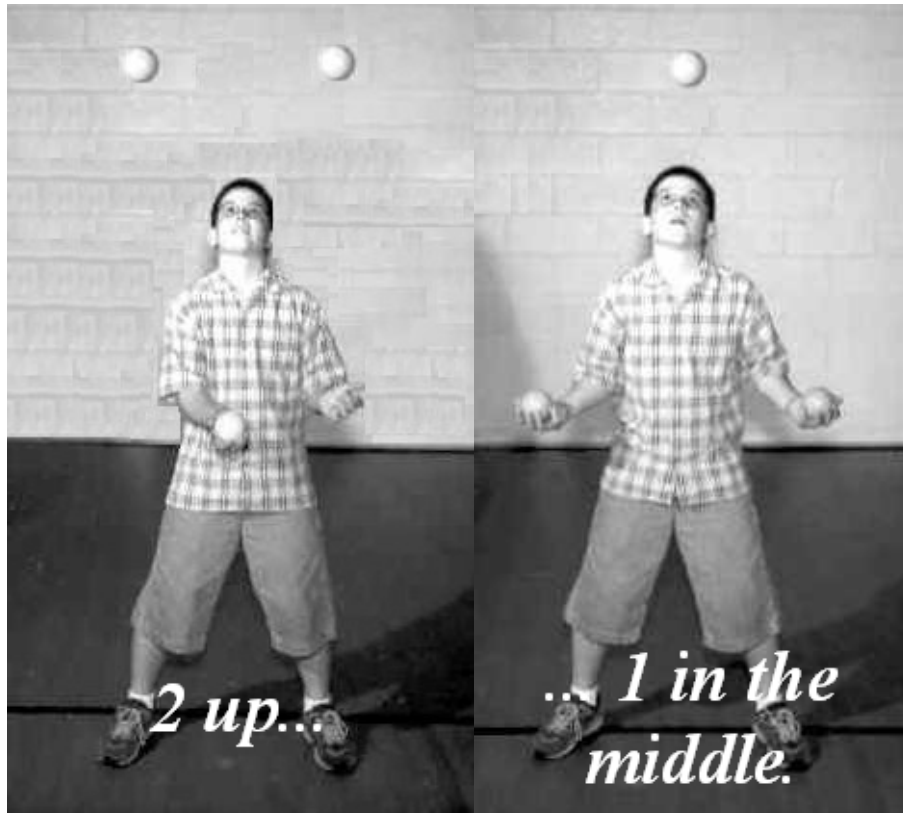
Hold two juggling balls or scarves in your right hand, one in the left. To begin, throw up two simultaneously - one from the right hand and one from the left. The throws go up side by side, about shoulder width apart.



When the two balls/scarves are at their peak, throw the third up in between them.



The pattern is continuous from this point. Two objects always go up together, and the third is then thrown in between them. Remember: Two up, one in the middle.



This pattern is much simpler than it sounds, but looks very impressive. It is also the basis for many other juggling tricks.

Although this may be too technical a point to make to students, the 2 + 1 pattern is really just juggling two with one hand, while the third is simply thrown up and down with the other hand! Understanding this nuance may help the teacher give corrective feedback.

The most common problems in learning the 2 + 1 are from the objects either colliding, or spreading out too far. Students will usually be aware of this, but reminders may help correct errors. As with many other juggling skills, it may help students to throw a little higher than usual.

Two in One Hand: As mentioned above, students who can juggle the 2 + 1 pattern are already juggling two objects in one hand whether they know it or not. It is also the basis for learning to juggle with four balls. To juggle two in one hand the student must choose from two basic styles.

The first style is to juggle in *columns*, side by side (which is what happens in the 2 + 1 pattern).

The second style is to juggle in a *circle*, with the circle going toward the outside of the body. A circle done with the right hand should go clockwise; a left-hand circle would go counterclockwise. (It is possible for the circles to go toward the inside of the body, but most people find this awkward.)

Some students will try to juggle two in one hand by shooting their hand forward and back. In effect, this creates a circle with its plane perpendicular to the student's body. This is an awkward technique, and should be avoided.

The Shower: This pattern is juggling in a circle, which is what most beginners do when they first attempt to juggle with two objects. In a way, teaching cascade-style juggling is an attempt to get students to NOT shower the balls. It is for this reason that shower juggling can be confusing to students who are in the midst of learning the Basic Cascade. It is important to clearly explain the differences between the two patterns.



Hold two balls/scarves in your strong hand, with your other hand empty. Throw both balls up one at a time in quick succession, and catch them both in the other hand.



Hold two balls in your strong hand, and one in the other. Throw the two balls in your strong hand one after the other. When they have both been thrown, the third ball should be handed across to your strong hand and then thrown. Stop when you have made all three throws.



To shower continuously, keep throwing with your strong hand, while the other continuously hands across the balls it catches.

Juggling Four Objects: Juggling four objects is accomplished by simply juggling two in each hand simultaneously. The objects do NOT cross. Students should be able to juggle two in each hand (separately) with good control before attempting four.

The easiest way for students to begin is to throw from each hand simultaneously, trying to keep the balls from hitting each other.

Advise the student to watch the top/center of the pattern, and to try to keep each ball going up and down in its respective circle or column, depending on which pattern the student has selected.

## PARTNER TRICKS

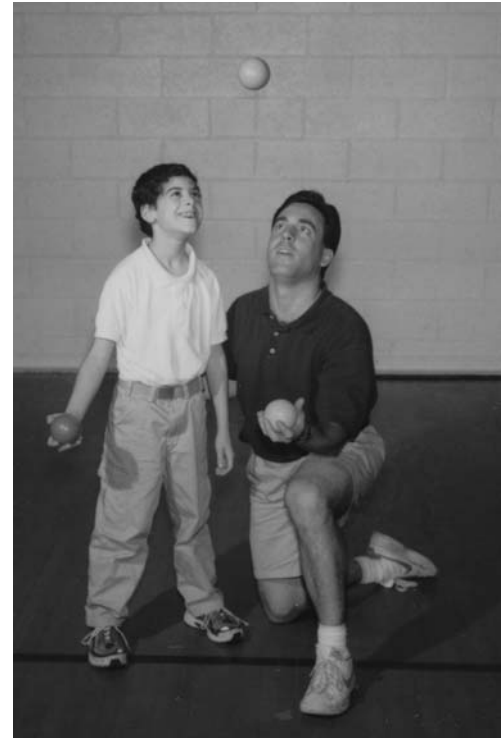
Juggling Side by Side with a Partner: This is a skill which can be done by two students of relatively low skill, or can be used to pair high and low skilled students for partner work.



Stand shoulder-to-shoulder with your inside hands behind your backs. The partner on the right uses his right hand, the one on the left uses her left. One partner has two juggling balls, the other has one.



The partner with two juggling objects throws first. When it gets to the top, the other partner throws. Then try to keep going!



Steals: This is a skill for two students who can juggle three objects very well. It is easiest if one of the balls is a different color than the other two.



One student juggles three balls while the other (the “Thief”) faces her. The juggler must continue juggling while the Thief steals all three objects.



The Thief waits until the odd-colored ball is thrown from the juggler’s right hand. He grabs it when it is at its peak with his right hand. The other two balls are then taken by grabbing with the left hand, and again with the right as they are thrown. The Thief then continues juggling on his own.

This skill can also be done from the side. Coming from the left of the juggler, the Thief would use his left hand to take a ball/scarf coming from the juggler’s right hand when it reaches its peak. As soon as that grab is made, the Thief reaches across with his right hand to catch an object thrown from the juggler’s left hand. The Thief would then receive the last throw from the juggler and continue the pattern on his own.

There are thousands of juggling patterns and tricks. Some of the better known moves are the Reverse Cascade, Mill's Mess, the Yo-Yo, the Box, and there are many variations. However, these are beyond the scope of this manual. Interested students should be referred one of the many books on this subject (See Appendix A - Teacher Resources).

Large Ball Juggling: Another fun partner activity is juggling cooperatively with three large balls. Beach balls work well, and are very safe. Two students face each other: One holds two of the large balls, the other holds one. Using underhand throws with two hands, the students juggle the three balls together.

Large balls can also be juggled with the students standing sideways to one another using the same two-handed technique. A fun challenge is to demonstrate some three-ball patterns, and have the partners try to reproduce them with the large balls.

## PASSING SIX OBJECTS



Partner passing is one of the most enjoyable juggling skills because it relies as much on teamwork as it does on juggling skill. Although the following progression is intended for first-time passers using balls or beanbags, the directions can also be used for ring and club passing. Although this discussion will be limited to two jugglers, there are many possibilities for groups of three or more people.

Students who want to learn to pass should be able to juggle solo very solidly. Here are some benchmarks to help decide who is ready to pass with a partner:

- Ability to comfortably juggle while standing still.
- Ability to look through the juggling pattern at something else.
- Willingness to cooperate with a partner, and persevere on a challenging skill.

A note about right/left hand dominance: Passing is almost always done right-handed to ensure compatibility among jugglers. It may not be fair, but left-handers usually have to learn to pass right-handed since most of their partners will be righties. Even if another lefty is available, becoming used to left-handed passing will prevent jugglers from passing with most other people.

## THE BASICS OF PASSING

Partners face each other at a distance of 4-8 ft (closer for balls, farther for rings and pins). The partners must begin juggling simultaneously, and maintain the same rhythm in juggling their objects. Passes must be thrown simultaneously with the right hand always passing and the left hand always receiving. Pass straight across - an object passed from the thrower's right hand will be caught by the receiver's left hand.



If you drop an object while passing, **DON'T LOOK DOWN**. This is because your partner may not have stopped and you could get hit with his next pass. Although it's possible to pick up a dropped ball or pin while continuing to pass, at the early learning stages it is best to stop and begin again.

Getting in Synch: This exercise ensures that the two jugglers can maintain the same juggling rhythm. No actual passing will take place in this step. Each juggler holds two objects in the right hand, one in the left. Have them stand facing each other at a distance of 5-6 ft.

To begin juggling, each juggler simultaneously raises his right hand, then brings it down and makes the first throw of their juggling pattern. Have the jugglers say, "Up-and-down", or "1-2-3" to coordinate their timing.



Continue juggling and try to maintain an even, synchronized rhythm. Say "Right, left" together to stay in time.



Practice looking at your partner through your juggling pattern.



## Practice Passes



Partners face each other, and each holds one ball in their right hand. Practice making throws which travel straight across from the thrower's right hand to the receiver's left. Always pass from the right hand, and receive passes in the left. The passes should be simultaneous. Throws should be at about head height.

Have partners take turns receiving a pass to begin juggling. The juggler holds two balls. The partner passes one ball to the juggler, who receives it in the left hand to begin juggling.



Partners face each other with three balls each. Begin by passing each of the right-hand balls across and begin juggling in synch. Repeat this step until you can do it well.

## HOW DO WE KNOW WHEN TO PASS?

Juggling partners need a system for knowing when to throw to themselves and when to pass. For this purpose, only right hand throws are counted. These throws can be passes across to the partner, or “self throws”.

Experienced jugglers may choose to pass on every right hand throw. However, the easiest system for beginners is to pass on every second right-hand throw, or every third.

If passing on every third right handed throw, it would sound like this: “Self, self, pass. Self, self, pass”. Throwing on every third pass also means that the same two balls are always the ones passed (try it and see!), and these balls can be a different color than the other four to avoid confusion.

If passing on every second right hand throw, the pattern is “Self, pass, self pass.” Another way of thinking about it is that you pass on every other right-hand throw.



## PUTTING IT ALL TOGETHER



Partners face each other. Each hold two juggling balls in your right hands, and one in your left hand.



Begin with simultaneous passes and juggle in synch with each other.



Count it out loud (“self, self, pass, self, self, pass”).

It is possible to practice passing by yourself. Stand facing a wall at a distance of about six feet. Using bouncy balls (lacrosse balls work well), you can throw with the right hand against the wall, and receive the bounce with the left hand. This method can be used to practice throwing and receiving passes, and to learn the passing rhythm.

## **CHAPTER IV**

### **JUGGLING WITH RINGS, PINS & OTHER OBJECTS**



## BEYOND BALLS & SCARVES

After becoming proficient at juggling balls, most people want to try juggling other objects. Ring juggling is a good next step and is often achieved quickly. Pins are considerably more difficult to juggle, and usually require more time to attain proficiency.

With more difficult juggling equipment allow students to practice with just one of the new object in order to learn its characteristics. After becoming comfortable, they should quickly move on to two, at which point they should do the same progression they used to juggle with balls.

Allowing students to use rings and pins introduces some new safety aspects to class. Students practicing with this equipment should have a separate area of the gym. All students should be made aware that rings and pins have the potential to cause injury if used carelessly.

## JUGGLING RINGS

Most students who can juggle three balls can learn rings fairly quickly. Some students even find them easier than balls. Rings can be thrown and caught a bit higher than balls, and they should be thrown with some backspin for stability.

### Tossing and Catching One Ring



Using one hand to practice throwing and catching the ring. It should spin backwards to keep it from wobbling. Catch overhand.



Using high throws, toss the ring from one hand to the other.

### The X with Two Rings



Throw the first ring up. When it reaches the top, throw the second ring to the same height.

Holding Two Rings in One Hand: To juggle three, you must learn to throw a single ring out of a hand that is holding two.



Hold one ring in the crook of your thumb and index finger. Hold the second ring with your thumb, index, and middle fingers. Practice throwing it high and accurately.

Three-Ring Juggling: Tell students to throw high and slow, and to throw all three rings without stopping. Review the chapter on ball juggling and use the same progression.



## TROUBLESHOOTING RING JUGGLING

Problem	Strategies
The first throw spins backward and flies behind the student	<p>Practice holding two rings in one hand, and throwing just one. A poorly spun first ring means it is probably being held uncomfortably in the hand.</p> <p>The student may simply be throwing too hard. The rings should be thrown with some backspin, but not too much.</p>
The student runs around out of control while juggling three rings	<p>Because rings are thrown high and caught overhand, students often move around and become disoriented.</p> <p>A good solution is to have the student kneel down while juggling. This prevents movement and encourages more accurate throws.</p>

## JUGGLING PINS



While the transition from ball juggling to rings is often quick, moving up to pins is not usually so easy. Encourage students to take their time with this skill, and to practice flipping and catching one club until comfortable.

### SAFE PIN JUGGLING



The heavy wooden clubs sometimes found in old school storerooms are leftovers from the days of club swinging, and are not meant for toss juggling. Modern juggling pins are made of plastic, and are unlikely to cause serious injuries. Students should not be permitted to juggle wooden clubs, even if they are proficient in the skill. These clubs can cause injuries through dropping on a foot, or by striking the juggler or other students.

## Flipping and Catching One Pin



Hold the pin in the middle of its handle. Using just one hand, toss the pin so it makes one backward revolution. Use high, slow flips. When you're ready, try flipping from one hand to the other.

Many students throw too low because they are afraid of being hit by the pin. Although low flips are easier to catch, this habit will make three-pin juggling more difficult later on.

The X: When the student appears comfortable flipping the pin from hand to hand, she can attempt the X with two pins. Once again, high and slow throws are best.

Holding Two Pins in One Hand: This can be an obstacle to some students, especially those with small hands.



Hold a pin in the crook of your thumb and index finger. Lay another pin across it, with the handle pointing toward the outside of your body. The top pin is supported by your fingers and held on top with your thumb.



Throw the top pin to the other hand with a high, slow toss.



Juggling Three Pins: Give students their own space, and do not allow others to get too close. It is also a good idea to have students practice over a mat to reduce noise and wear and tear on equipment.



## **OTHER JUGGLING OBJECTS**

Students who are able to juggle with balls, rings, and pins now have the ability to juggle almost anything. Some fun and unusual objects for students to work with are hula hoops, traffic cones, rubber chickens, Koosh Balls, volleyballs, and stuffed animals.

Another variation is to juggle mixed objects, such as a ball, a ring, and a pin. The different orientations of the objects make this a challenging skill, but one which many students will enjoy.



## **CHAPTER V**

### **MANIPULATION & BALANCING**



While “juggling” usually refers to tossing and catching objects, “manipulation” is an umbrella term that covers almost any skillful handling of equipment. Common manipulative activities in Circus Arts include devil sticks, spinning plates, diabolos, nesting cups, cigar boxes, contact juggling, ball and parasol, hat tricks, and balancing.

Manipulative skills offer variety, are fun to learn, and are often fascinating to watch. Some equipment, like devil sticks, can be made fairly easily. Other items must be purchased. Some manufacturers sell equipment in bulk to schools, and often carry equipment designed especially for school use.

# DEVIL STICKS

(Grades 3 and up)

Devil sticks, also known as “rhythm sticks” consist of three sticks: one large, and two smaller “handsticks”. The handsticks are used to move the devil stick back and forth, through spins and twirls, and throws and catches.

Devil sticks have become popular toys, and many students may already own a set. Several types are now available in PE equipment catalogs and toy stores. Some are simply straight sticks which taper inwards to provide weight at the ends. Others have balls, pom-poms, or tassels at the ends to provide counterweight and decoration. Some are also coated with rubber or tape, creating a high-grip surface for contact with handsticks.

## BASIC TECHNIQUES FOR THE DEVIL STICK

“Single Sticking”: One handstick contacts the devil stick at a time.



Hold each handstick at the bottom, and point them forward. Your hands should be about shoulder width apart.



Stand up the devil stick on the ground, resting near the end of one of the handsticks. The handstick should contact the devil stick on its upper quarter.



Practice balancing the devil stick on each handstick. The devil stick should be pushed across and caught, not hit back and forth.

When students can move the devil stick back and forth on the ground under control, they are ready to begin lifting it into the air. When a good rhythm is established, students should pull up with the handsticks to lift the devil stick. They should not speed up when lifting - the devil stick should move at the same speed in the air as it did on the ground.

Many students will speed up when they lift the devil stick into the air, leading to wild and uncontrolled manipulation. Encourage students to keep a steady, even cadence.

When giving feedback, point out how the devil stick will counterbalance against itself. It can swing nearly parallel with the ground without flipping over. This effect can help students keep the devil stick moving slowly, and under control.

“Double Sticking”: Both handsticks contact the devil stick simultaneously.



Stand up the devil stick and place the handsticks on each side - one near the top and one near the bottom.



As you push the devil stick back and forth, the handsticks switch positions on each touch. Example: If the left handstick is at the top of the devil stick on the first contact, it will be at the bottom for the second contact, while the right handstick does the opposite.

Many students will find double sticking easier than single-sticking. However, both techniques should be learned to facilitate trick development later on.

## TROUBLESHOOTING THE DEVIL STICK

Problem	Strategies
The devil stick flips over the handsticks and falls	<p>The student is probably contacting the devil stick below its midpoint.</p> <p>Instruct the student to always catch the devil stick on its upper quarter when using the single sticking technique.</p>
The devil stick goes too fast and gets out of control	<p>The student's devil stick is probably vertical, and being hit rapidly back and forth.</p> <p>Students must learn to counterbalance the devil stick to keep it under control. By allowing the devil stick to lean over to each side, it will move more slowly.</p> <p>Have the student keep the handsticks spread out to about shoulder width, and start again on the ground with slow pushes and catches.</p>

## DEVIL STICK TRICKS

A general teaching strategy is to have students begin a new trick from the ground on the first attempts. Students can then concentrate on the trick without having to make the transition during the skill.

The Flip: Using the single sticking technique, the devil stick is pushed harder on one side and makes a flip turn. It is then stopped by the other handstick, and normal single sticking is resumed.



Stand up the devil stick on the ground. Flip it once, catch on the other handstick, and stop.



Repeat the last step, but begin single sticking after the flip.



Begin single sticking, try a flip, and then continue single sticking.

Students can also attempt continuous flips, or double and triple flips. Be sure to give them a safe practice area.

Helicopter Spin: Two handsticks are used to spin the devil stick parallel to the ground, like a helicopter blade. One handstick pulls, while the other pushes.



Try this trick on the ground first. One handstick pulls toward you, the other pushes away from you.



Now try it up in the air, and try not to crash your helicopter!

Airplane Spin: Contacting the devil stick just below the middle point with one handstick, continuously catch and lift as it rotates sideways toward the outside of the body. It looks like an airplane propeller.



Stand up the devil stick and place one handstick just below the midpoint. Pull up on the handstick and let the devil stick to rotate around it toward the outside of your body. Stop it again when it comes around by catching near the top.



If you can do one spin and stop, now try to keep it going. Instead of stopping it after one spin, repeat the catch just below the midpoint and pull up on the handstick to keep it spinning. Keep catching just below the midpoint and give it lift up each time it comes around.

Partner Devil Sticking: Two students stand shoulder to shoulder, each holding a handstick, and cooperate to manipulate one devil stick. The person on the left uses their left hand, person on the right uses their right. This can also be done with the partners facing each other.

Throwing to a Partner: Partners stand side by side about three feet apart, each with two handsticks. One person manipulates the devil stick, while the other waits for the throw.



Give the stick a push and flip it over to your partner. The catcher must stop the devil stick's spin with the far side handstick, and then begin single or double sticking.



## SPINNING PLATES

(Grades K & up)

The best spinning plates for school use are plastic, have a lip around the bottom, and a dimple in the middle. The lip enables the plate to hang on the stick, while the dimple ensures that it will spin with stability on a stick or finger.

Spinning plates can be used at the primary level to illustrate application of force, directions, and levels. For upper elementary students, plate spinning can be combined with balancing, partner, and group work. At the secondary level the plate can be used to demonstrate principles of physics such as angular momentum, conservation of momentum, center of mass, centripetal force, friction, and gyroscopic forces. There are several techniques for spinning a plate, and in this section they are listed order of difficulty.

### The Easy Way



Hold the stick in the middle, and put the plate on top. You should be able to look down and see the top of the plate.



Place the plate on top of the stick, with the stick in the middle



Make a “spider” by spreading out your fingers. Put your spider on top of the plate and use it to give the plate a twist and make it spin!

This method is best for primary-age students, most of whom would find the following steps too difficult.





## Using the Stick to Spin the Plate (The Hard Way)



Hold the stick softly at the bottom, and point it straight up.



Using the lip on the bottom of the plate, hang the plate on the stick (it will look like a big lollipop), and check that the stick is pointing straight up.



Relax your arm and shoulder and make sure you are not squeezing the stick. If your knuckles are white, you're holding too tight!



Slowly begin turning the top of the stick in a circle. Gradually speed up, and try to make the stick move along with the plate.



When the plate is moving fast enough to level out, quickly stop the stick in the middle. The stick will (hopefully) go in the dimple, and the plate will continue spinning on the stick.

It takes a while to develop a “feel” for the spinning plate. Some students will succeed for the first time when they least expect it. They often experience an “A-Ha!” moment when they succeed.

If the teacher is proficient he can gently hold the child's hand and spin their plate for them. To do this, have the student hold the stick at the bottom and place your hand on top of theirs. Have them relax their arm and shoulder muscles to feel your spin technique.



*Assisting a plate spinner*

## TROUBLESHOOTING PLATE SPINNING

Problem	Strategies
<p>Student holds the stick very tightly and cannot get the plate to move with the stick</p>	<p>This is the most common problem people experience when learning to spin plates.</p> <p>Remind students to hold the stick as loosely as possible: “If your knuckles are white, you’re holding too tight!” It also helps to drop the shoulder and relax the whole arm.</p> <p>Using just the wrist, practice turning the top of the stick in a circle. The stick should make a cone shape when they spin.</p>
<p>The plate flies off the stick</p>	<p>Again, probably holding too tight. They might also be pointing the stick forward instead of straight up. Correct these errors, and check for tight arm muscles.</p> <p>The student may also be starting too fast. Coach them to begin their spin slowly, then gradually build up speed.</p>
<p>Student has a good spin, but cannot stop in the middle</p>	<p>Some students will allow the plate to slow down before stopping. They should instead try to quickly “hit the brakes” when the plate is going fast.</p> <p>Students may try to stop in the middle too soon, before they have established their spin. The plate should level off before they try to stop in the middle.</p>

## SPINNING PLATE TRICKS

### The Toss Start



Hold the stick straight up in one hand, and hold the plate in your other hand. Use your wrist to toss and spin the plate in one motion, and then catch it spinning on the stick.



“Give” with the stick as you catch so the plate won’t bounce off.

### Throw & Catch:



While the plate is spinning on the stick, toss it up a short distance. To catch, aim for the middle of the plate, and cushion it as it comes down. The throw should be straight up so you can get underneath it.

Students usually have little trouble with the throw, but may not “give” enough when catching. This provides an opportunity to explain the concept of absorbing force.

### Turning the Stick Over



Throw the plate up, turn the stick over, and catch on the other end of the stick.

Spinning on a Finger: Spin the plate on the stick. Point the index finger, gently slide it up the stick, and pick up the plate. The plate will spin longer if you use the fingernail.

Arm Curls: A challenging, but impressive move.



After getting a fairly fast spin, take the plate off the stick with your fingernail.



Bend at the waist and begin to curl your wrist down and behind you so it begins to pass under your arm. Be sure to keep the plate facing up.



When the plate is curled all the way behind your arm, bring it up and around while beginning to stand straight up. When done correctly, you will finish back where you started.

Have students practice this move with a plate that is not spinning. Hold it from the bottom, and be sure that it is facing up during the move.

Balancing: To balance a spinning plate on your hand, watch the top of the plate and move your hand to stay underneath it. (See the section on Balancing later in this chapter for more information on this skill).



## PARTNER TRICKS FOR THE SPINNING PLATE

### Throwing & Catching with a Partner:

Begin with just one plate for two students, each of whom has a handstick. The partners should stand close together and face each other. Have them point their handsticks straight up. The thrower tosses the plate upwards, but with little or no forward motion. The catcher aims for the middle of the plate and “gives” with it as it comes down on his stick.



Be sure the thrower tosses up, not AT the catcher.

### Throwing & Catching Two Plates:

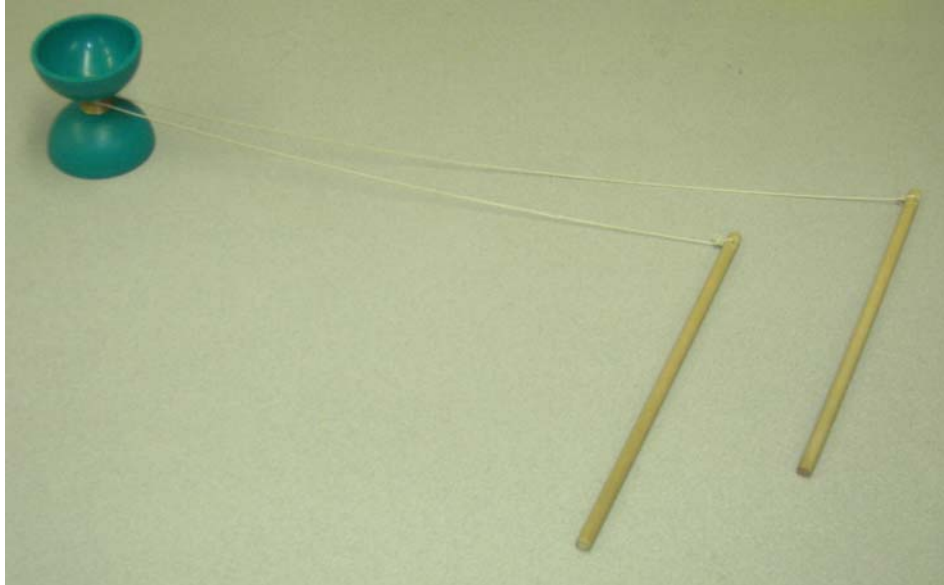
Two partners face each other, both with spinning plates on sticks. Count to three, and throw at the same time. Toss the plates side by side to avoid collisions.



Group Throws & Catches: Any number of students can stand in a circle, all holding a spinning plate on a stick. On signal, everyone tosses their plate up and to the right, and then catches the plate that is coming to them from the left.

# DIABOLOS

(Grades 3 and up)



Combining some aspects of a top and a yo-yo, diabolos are shaped like an hourglass, and are spun on a string at the juncture of the two halves. The diabolo is fairly simple in the beginning stages. Many of the easier tricks are quickly accessible to students, which may account for its popularity with children.

## KNOTS & STRING CARE

Diabolo strings can be firmly tied to the handsticks with a bowline knot. Strings will occasionally break or become tangled, necessitating a change. It is also prudent to have very clear cleanup procedures for diabolo equipment. If handsticks are put away carelessly the strings can become hopelessly tangled, and become a serious nuisance for teachers and students alike. A good class rule is that diabolos and their handsticks must either be handed to another person to use, or put away properly with the string wrapped securely around the sticks. When they have been wrapped and secured, the handsticks can be put in a bucket, string ends up.

## GETTING THE DIABOLO STARTED

The dominant hand will do most of the work in keeping the diabolo spinning. We'll call this the "Power Hand". Once again, left-handers will usually need to conform to the right-handed method if they intend to participate in partner or group tricks. All diabolo instructions here are intended for right-handers, but could be reversed for lefties.



Place the diabolo on the ground on top of the string, with an open end facing you.



Hold the string taut with the handsticks about shoulder width apart. Roll the diabolo to the **LEFT**, and quickly pick it up before it stops rolling. The diabolo will remain spinning in the center of the string, but not for long.



Keep the diabolo spinning by continually pulling up with the Power Hand. Pull up quickly but firmly. It should feel like you are pulling the string of a spinning top over and over again.



## CORRECTING TILT

The diabolo may tilt forward or backward, and this must be corrected to keep it from falling off the string. This is done with the Power Hand, while the non-dominant hand generally stays still.



If the diabolo tilts forward pull back towards you with the Power Hand, but don't stop the pulling motion. When the diabolo is even again, go back to pulling normally with the Power Hand.



If the diabolo tilts back toward you, push forward with the Power Hand, but don't stop the pulling motion. Go back to normal when the tilt is corrected.



If the diabolo rotates sideways, turn your body to keep the open end facing you.



You must continue the pulling motion with the Power Hand while correcting tilt, otherwise the diabolo will slow down and stop.

## DIABOLO TRICKS

Throwing & Catching: The diabolo must have a fast, stable spin before throwing.



To throw, quickly pull the handsticks apart. The string will come taut and launch the diabolo straight up.



To catch, hold the string taut, raise the Power Hand's stick up to point at the diabolo. Wait until the diabolo makes contact with the string before returning to the normal spin position.





## Jumping Rope



Throw the diabolo up, jump over the string like a jump rope, and then catch the diabolo. Try a double jump!



Be careful not to throw the diabolo forward or backward. It should go straight up, and come down right in front of you. Also, you should jump up and down in the same spot without moving to another spot on the floor.

### **TROUBLESHOOTING THE DIABOLO**

<b>Problem</b>	<b>Strategies</b>
The diabolo slows down and falls off the string	The diabolo must be kept spinning with constant pulls from the dominant hand. If the student pauses for too long, it will slow down and stop.
Student has difficulty catching the diabolo after throwing	<p>Make sure the student is keeping the string pulled taut, and is pointing their Power Hand at the diabolo before making the catch. The string should point upwards, not parallel to the floor.</p> <p>Be sure to throw the diabolo straight up to make catching easier.</p>

## PARTNER DIABOLO TRICKS

Throwing & Catching with a Partner: Partners should stand side by side at a distance of at least 10-15 feet.



Thrower: Quickly pull the string taut with it angled slightly toward your partner. This will make the diabolo fly over to your partner high enough for her to get underneath it and catch.



Catcher: Hold your far hand up and keep the string tight. Line up the string with the diabolo, and keep it taut until you catch.

Replacement Catch: One partner spins the diabolo and prepares to throw. The other partner has a set of handsticks and stands behind the thrower. The thrower tosses straight up and then quickly moves out of the way for his partner to move forward and make the catch.



Students will quickly be able to throw and catch over long distances. Throws going the length of a gym are not uncommon! Institute appropriate safety measures.

## NESTING CUPS

**(Grades 4 & up)**

Cup juggling is fun and easy for students, although a bit noisy! The cups fit inside each other, and are manipulated by flipping and catching. In basic moves the bottom cups (the ones held in the hands) don't leave the hands. More advanced manipulations include throwing all the cups before catching them inside each other. Cups are excellent for student performances, and some groups have choreographed rhythmic routines using the cups' distinctive sound to keep the beat.

Many drops will dent and disfigure the cups. One solution is to require students to always practice over mats. This also significantly reduces the noise level.



### Flipping One Cup from Another



Place one cup inside another and hold the bottom cup.



Practice tossing and catching the nested cup, using flips that rotate toward you.



Practice flips and catches with your other hand.

### Three Cups & Two Hands



Hold two cups in one hand and one in the other. Practice flipping one cup back and forth and catching with the cups you are holding. Use flips that rotate toward you.



Try double flips.



Flip the cups sideways. To do this, use a sideways wrist motion to toss.



Try to flip a cup up and catch it under your leg!

# BALANCING

(Grades K & up)

The secret to balancing is to always watch the top. It is easiest to balance tall objects that have a high center of mass. This allows more time to see which way the object is moving.

One of the best ways to learn balancing is to use peacock feathers, or balloons on sticks. Each has a high center of mass, and they move slowly enough for even very young children to have success.

Peacock feathers are relatively inexpensive, but fragile. They should be stored in a hard tube or box to prevent bending. Children should be cautioned to handle them gently.



The chin is the safest places to balance objects on the head. Objects balanced on the nose can slip and fall into the eye. Also caution students not to run around while balancing. They won't see where they are going, and could run into another person or obstacle. Another option is to have children sit or kneel for their first attempts at balancing.

## Basic Hand Balance



Hold your hand out flat, palm up. Stand the feather straight up on this hand.



Watch the TOP, let go, and move your hand to keep the feather standing straight up.

Balancing on Other Body Parts: Directions to students should always include “watch the TOP”.



Try to balance the feather on your: Fingertips, elbows, shoulders.



Tilt your head back and balance the feather on your chin. Be sure it is standing straight up before you let go.



Try the hardest balance of all: Stand on one foot, and then try to balance the feather on your toes! You have to balance yourself and the feather at the same time!



Balancing Other Objects: Solid objects will move much faster than feathers or balloons. Have students practice in a safe area. Pillo-Polo mallets are an excellent choice because of their high center of mass. Spinning plates also work well, although there is the slight hazard from the plate falling off and possibly hitting the student.

## **CHAPTER VI**

### **UNICYCLES, STILTS & MORE**



Although teaching students to ride unicycles or walk on stilts may seem daunting, these skills can be taught quite effectively with knowledge of basic progressions. It should be understood that dynamic balance skills usually take more time to learn than juggling and manipulative activities. Students may not experience success as quickly, but the rewards of conquering these challenging skills are substantial. Every class has a few students who make it their goal to master the unicycle.

## **UNICYCLES**

Riding on one wheel is a highly attractive skill to people of all ages. Challenging and unusual, it often inspires students to practice with intensity.

Unicycling is like learning to walk - it can be slow going at the outset, but learners often become so comfortable in the skill that they wonder why it seemed so difficult in the beginning!

Students can begin unicycling whenever they are tall enough to comfortably reach the pedals, although many teachers will reserve unicycling for students in fourth grade and up.

Since students naturally learn at different rates, it is difficult to predict how long it will take a person to learn to ride a unicycle. The skill appears to take most people a minimum of several hours to be able to ride forward unassisted. Students should be prepared to put in a fair amount of time before achieving basic proficiency.

People often perceive unicycling as dangerous, perhaps because they have seen a daredevil performer who rode (seemingly) out of control, or on a very tall unicycle. The result is an unfounded perception of risk. The reality is that when proper safety procedures are followed, unicycling is safer than riding bicycles, skateboards, scooters or in-line skates. This is because unicycles do not permit the rider to coast or move at high speeds.



## UNICYCLE SAFETY CONSIDERATIONS

These skills can be thought of as similar to gymnastics in terms of class routines and safety procedures. Students should always be supervised when practicing, and be taught how to spot each other. Horseplay should never be tolerated.

Students should be made aware of all rules and safety procedures. Here are some appropriate rules for unicycling:

- Never interfere with a unicyclist who is practicing.
- No horseplay.
- The practice area should be free of obstructions.
- Unicyclists have "right-of-way" in the practice area.



Never allow students to brace themselves with “ski poles” or similar objects - a fall onto such equipment could cause serious injury. (Note: There are some books that actually recommend this technique, but most practitioners agree it should definitely be avoided.)

## TYPES OF UNICYCLES

The best unicycles for institutional use are “standard” unicycles. They have pedals attached to the wheel (as opposed to using a chain to drive the wheel), and a seat reaching to about waist height. Be sure to purchase decent unicycles because they will be subjected to "hard use" in a school setting.

Unicycles equipped with a quick-release clamp on the seat-post are ideal because this allows the seat height to be easily adjusted for any student. Unicycles are now available in many PE equipment catalogs.

## SPOTTING

Students should learn to spot each other when they learn to unicycle. The spotter's job is not to hold the rider up, but rather to offer support while the rider tries to balance. Riders should be encouraged to support their own weight at all times.



Stand on one side of the rider at arm's length, even with their shoulder. Hold your hand out flat, and let the rider put his hand on top of yours.



Move with your rider when he starts moving. Encourage him to sit up straight and support his own weight.



## LEARNING PROGRESSIONS FOR UNICYCLING

Students can work in pairs or threes when learning to unicycle. The following progression can be demonstrated for the class as a whole, after which students can begin taking turns in their groups.

Checking & Adjusting the Seat Height (with quick-release clamp): Stand the unicycle up alongside you. It should reach to about the height of your hips. If your unicycles have quick-release seat clamps, follow these steps to adjust the seat height:



Hold the wheel firmly between your knees, then undo the quick-release clamp. Adjust the seat to the correct height for your body, and hold it there. Tighten the clamp so the handle is tucked in toward the seat post and does not stick out.



Pedal Positions: There are two basic positions. The “Safety Position” is when both pedals are horizontally even. The rider’s weight is distributed evenly between both pedals, almost as if she were standing up. The rider has the most control in this position. Always try to begin and end pedaling in the Safety Position.



When one pedal is at the bottom and one is on top, this is called the “Dead Spot”. In this position the rider’s weight is mostly on the down-pedal, and it is easy to become stuck and lose balance. Although it is necessary to mount the unicycle in the Dead Spot, the rider should attempt to pedal smoothly through it without stopping when riding forward.

## Mounting the Unicycle



Position the unicycle about an arm's length from a wall, with the tire parallel to the wall. Put your hand on top of the spotter's. Hold onto the wall with your other hand.



Rotate the wheel until one pedal is at the bottom. Sit lightly on the seat and put one foot on the down-pedal. Step up, and keep your weight on the down-pedal. Lean slowly forward until you can place the other foot on the up-pedal.



There is an important safety issue here: The pedal must be in the down position when mounting – a student stepping on a pedal that is not in the down position will either have the unicycle shoot away, or will have the other pedal swing up to strike their shin.



Slowly push the pedals forward until they are even - this is the Safety Position. Balance with even pressure on the seat and both pedals.

The spotter should assist the rider in mounting, but the rider should be encouraged to support their own weight as much as possible, and not pull too hard on the spotter.

Getting Comfortable: As when walking a balance beam, the head leads the body. Encourage straight and tall posture on the unicycle. The following exercises may help students become more comfortable on the unicycle before attempting to ride.



Sit up straight and tall. Pick a spot high on the wall and watch that spot. Don't look down at the wheel!



With the pedals in the Safety Position, stand up on the pedals. Notice how well balanced you are in this position because your weight is pressing down on the pedals. Slowly lower yourself down onto the seat, but keep pressure on the pedals.

Riding Forward at the Wall: The student should be touching the wall at about an arm's length with one hand, with the other resting on top of the spotter's. The student should be encouraged to try to support their own weight on the unicycle and not lean heavily on the wall or spotter.



Be sure the pedals are in the Safety Position before riding forward. Sit up straight and tall, and look forward.



Lean slightly forward to begin moving. Push the pedals forward for a half turn of the wheel until the pedals are in the Safety Position again. If you get stuck in the Dead Spot, slowly push past it and into the Safety Position. Practice this step until comfortable, using half-turns of the wheel.



Riding in the Open with a Spotter: When comfortable, the rider can move into open spaces, with the spotter walking alongside. The rider should try to balance themselves, and not lean too heavily on the spotter.

Riding Free: There are several strategies for becoming comfortable in unassisted riding. Students may prefer one method over others, and should be permitted to continue working with the technique that suits them. Some of these techniques are:

- Riding in the open with one spotter, and letting go when comfortable. The spotter can walk alongside to give assistance when needed. This allows the rider to let go when comfortable, and re-grasp when they need support.
- Riding gradually away from the wall without a spotter.
- Riding in the open with an experienced unicyclist as a spotter. This is a good technique if a proficient rider is available. "Spotter riders" should be very sturdy on their unicycle, able to change speeds, and turn to either direction.

## UNICYCLE GOALS

This section is for students who are able to ride forward in an open space unassisted. Advanced goals for any unicyclist wishing to become truly proficient are to be able to turn, rock, and free mount.

Turning: A unicycle can be turned by leaning slightly in the intended direction of travel and riding into the turn. Students should practice turns to the left and right.

Some other exercises for becoming proficient at turns are riding in circles (both clockwise and counterclockwise), and figure-8's.

Rocking: Also called “idling” or “hovering”, the unicycle remains in one spot. This is done by moving the wheel forward and back in small movements. Students should first attempt this skill against the wall or with a spotter.



Rocking is always done with the same pedal moving back and forth through the down position (Dead Spot). The unicycle is always in motion.

Students may need to experiment to determine their preferred foot for this skill. The preferred foot will be on the down-pedal.



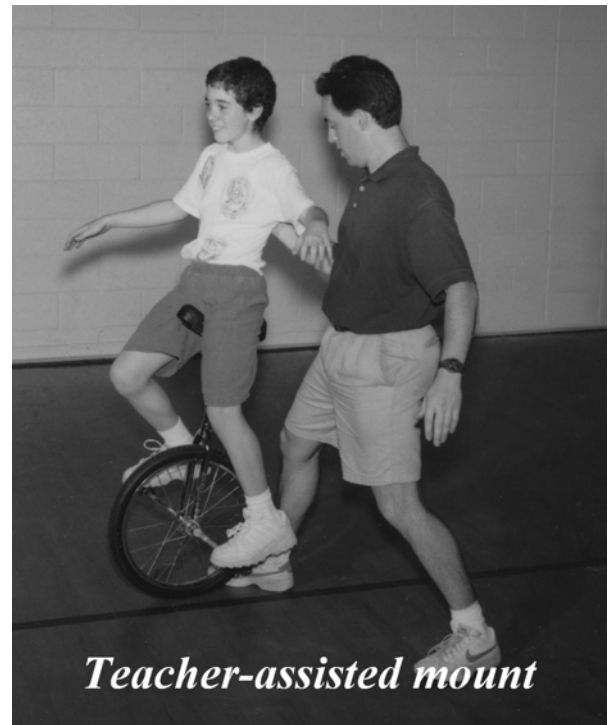
Begin in the Safety Position with your strong foot forward. Slowly pedal forward until the pedals are close to reaching the Safety Position again, gently stop, and then move them backward in the same motion. The down-pedal will move back and forth through the down position as you rock

As their proficiency increases, students should try to move the wheel forward and backward in smaller and smaller increments.



Teacher Assisted Lead-Up to the “Free Mount”: The teacher can help students learn to mount the unicycle by using this technique. In an open space, have the student sit on the seat and step on the down pedal in preparation to mount. Position yourself on the same side as the student’s down pedal. Put one hand on the student’s lower back, and stop the back of the wheel with the side of your foot.

Have the student mount the unicycle, and use your hand to give a gentle push forward.



Free Mounting in an Open Space: Mastery of this skill permits the rider to be truly autonomous. When proficient at using the “stopped wheel” technique, riders can attempt a mount in the open.



Stand up straight while sitting on the seat, and rest your strong foot on the down-pedal. Step up and quickly put your other foot on the other pedal, and begin riding forward.

Partner Unicycling: If just learning to ride isn’t rewarding enough, riding with a friend is even better! Here are some partner challenges:

- Hold hands while riding together.
- Play Follow-the-Leader on unicycle.
- Do a “Pinwheel” by riding toward each other, grasping hands (as if shaking hands), and continuing to ride around each other.



## STILT WALKING

(Grades 3 and up)

One advantage of stilt walking is that the equipment can be made fairly easily, rather than purchased. Although different types of stilts are described in this section, the teaching progression is only for strapless stilts. This is due to safety issues inherent to the use of strap-on stilts.

### TYPES OF STILTS & STILT SAFETY

There are two main classes of stilts: those that are held in the hands, and those which are strapped on to the person's legs. Strapless stilts are safer, but do not afford much freedom of movement since the stilts must be grasped with the hands. However, strapless stilts are best for institutional use because a person falling can simply step off of them.

Strap-on stilts allow great freedom of movement, but do present safety concerns. A fall from strap-on stilts is dangerous because it is not possible to step out of the equipment. If strap-on stilts are used in an educational or institutional setting, it is advisable to have students practice on or around mats. Some rules for stilt walking:

- Never interfere with a stilt walker who is practicing.
- No horseplay.
- The practice area should be free of obstructions.
- Stilt walkers have "right-of-way" in the practice area.



Checking the Size of the Stilts: To ensure that students will not fall forward onto the top of their equipment, stilts should reach above the shoulders.

## Mounting at the Wall



Stand up the stilts against a wall. Stand between them with your back to the wall.



Grasp the stilts by reaching around from the inside and pointing the hands downward.



Keeping your back against the wall, carefully step up onto the stilts. When comfortable, lean forward and walk away from the wall.

## Free Mounting



Stand up the stilts in an open space.



Bring the arms around the stilts from the inside and grasp them with the hands pointed downward.



Step up onto one stilt and then the other, and quickly begin walking.

Walking: The most important aspect of walking on strapless stilts is to have the arms and legs on the same side of the body moving up and down at the same time. Have students practice without the stilts, as this action is unnatural compared to the oppositional arm and leg movements of normal walking.

Stilt Stunts: Some advanced stilt walkers may be able to walk up a small flight of “stairs” made by piling gymnastic mats, jump a large rope (turned by two helpers), or straddle walk over a mat.

## **ROLA-BOLA**

**(Grades 3 and up)**



The Rola-Bola, or Balance Board, consists of a wide plank and a cylinder. Place the plank on top of the cylinder and try to remain balanced while standing on top.

Rola-Bolas are relatively easy to build. For beginners, include stops at each end to prevent the cylinder from rolling out from under it. Some commercially available Rola-Bolas have a track and groove system to keep the board from twisting.

Using a Rola-Bola is generally easier than unicycling, and also permits the use of the hands for juggling, plate spinning or other skills.

### **ROLA-BOLA SAFETY**

Although the Rola-Bola is not a locomotor skill like stilts or unicycles, there is the possibility of injury from an awkward or abrupt fall. Therefore, it is best for students to practice on a gymnastic tumbling mat. This also has the advantage of slowing down the rolling cylinder. The practice area should be in an open space away from walls.

## LEARNING PROGRESSION FOR THE ROLA-BOLA

Spotting the Rola-Bola: The spotter stands directly in front of the person on the Rola-Bola with hands palm up. The student then places her hands on top of the spotter's for stability. The spotter should hold his hands shoulder width apart, at an appropriate height for the student attempting the skill.

Mounting the Rola-Bola: Put the roller under one side of the board. Step on the down side first, and then gently place the other foot on the upside of the board. Gently transfer weight to the upper foot to get the roller underneath the board.

Keeping Balanced: Stand on the board with the feet slightly past shoulder width apart. The knees should be slightly bent. Stand up straight and avoid looking down at the board. Move from the hips and try to keep the roller underneath the center of the board.

## ROLA-BOLA TRICKS

Standing Still: Use the knees and hips to make small adjustments and remain nearly stationary on the board.

Side Sways: Use the hips to sway the board back and forth on the roller all the way to the ends.

Jump Mount: Use your hands to steady the board with the roller under the middle. When it is balanced, take the hands away and quickly jump onto the board with both feet at the same time. Both feet should make contact with the board simultaneously.

Combination Tricks: When students are comfortable on the Rola Bola, they can attempt juggling, devil sticking, or plate spinning. Be sure they have some proficiency in the juggling or manipulative skill they are attempting. Instruct students to proceed with small steps: Begin by making just two or three throws. When successful, attempt more. Learning these skills on the Rola-Bola is almost like learning them all over again. Encourage persistence and practice.

## **CHAPTER VII**

### **UNIT PLANNING & ASSESSMENT**



This chapter will discuss how to create a circus arts program appropriate for educational settings, including the elementary, secondary, and university levels. This information may also be of use to practitioners in the recreation field as well.

The sample schedules listed in this chapter are intended for traditional instructional units of one to three weeks. Teachers will naturally need to adjust for available time and equipment. Teachers may also want to insert non-circus activities to address fitness development and other goals.

### **ELEMENTARY LEVEL (Grades K-5)**

Circus arts can be taught as a traditional unit of one to three weeks, and / or explored on several occasions throughout the school year. When presenting circus skills in a traditional unit, the goal should be to introduce students to a small group of skills, and to provide students with as much practice time as possible.

A brief unit is usually not enough time to develop significant unicycle skills. Unless students will have ongoing access to unicycles they can be omitted from the unit, perhaps with Rola-Bolas being substituted.

The final day of the unit can be devoted to brief student demonstrations of their favorite skill or trick. These low-key demonstrations can be for classmates, or for parents during a visiting day.

### SAMPLE SCHEDULE FOR A ONE-WEEK UNIT (Grades K-2):

- Day 1: Juggling with one and two scarves, two-scarf tricks, the X.
- Day 2: Scarf tag, review the X, holding two scarves in one hand, three-scarf juggling.
- Day 3: Three-scarf juggling, balancing.

### SAMPLE SCHEDULE FOR A THREE-WEEK UNIT (Grades 3-5):

- Day 1: Introduce ball juggling, devil sticks, and safety rules.
- Day 2: Review ball juggling and devil sticks. Introduce plate spinning.
- Day 3: Review balls, devil sticks, spinning plates. Introduce basic partner tricks with devil sticks and spinning plates.
- Day 4: Review partner tricks for devil sticks and spinning plate. Introduce side-by-side partner juggling. Introduce scarves.
- Day 5: Review previous skills. Introduce balancing.
- Day 6: Group scarf juggling. Introduce rola-bola. Review safety rules. Open practice of all skills.
- Day 7: Introduce diabolo. Open practice of all skills.
- Day 8: Introduce partner diabolo tricks. Help students decide on their best skill for class demonstration on last day of unit.
- Day 9: Practice time. Peer skill demonstrations.

## **SECONDARY LEVEL (Grades 6-12)**

Students at the middle or high school levels should be given the opportunity to experience as many skills as possible in the time available. If block-scheduling or full semester units are an option, see the section on university-level courses for further information about programs of this duration and scope.

Although unicycle skills may not be greatly developed in a two or three-week unit, students at this age level still benefit from the experience of attempting the skill. Students who experience success with the unicycle often want to purchase one at the conclusion of the unit. If unicycles are included, they should be introduced early in the unit to assure maximum time for skill acquisition.

Notice that scarves are not introduced until well after ball juggling. This assures students will practice with balls, rather than learning with scarves and then attempting to transfer to balls. Students who learn first with scarves are sometimes frustrated by how fast the balls seem by comparison.

### **SAMPLE SCHEDULE FOR A THREE-WEEK UNIT (Grades 6-12):**

- Day 1: Introduce ball juggling, unicycling, and safety rules.
- Day 2: Review ball juggling and unicycling. Introduce devil sticks.
- Day 3: Introduce plate spinning. Open skills practice.
- Day 4: Introduce partner tricks for devil sticks and spinning plates.
- Day 5: Introduce scarves. Introduce Rola-Bola.
- Day 6: Introduce diabolo. Introduce balancing.
- Day 7: Skills review. Introduce partner juggling with large balls.
- Day 8: Introduce partner diabolo tricks. Open practice.
- Day 9: Open practice. Peer skill demonstrations.



## ASSESSMENT

The demand for accountability in education is growing rapidly. Fortunately, circus arts provide excellent opportunities for realistic assessments. Most circus skills are easily quantified, such as the number of continuous throws a student can make while juggling, or how far a student can ride a unicycle unassisted. Indeed, the term “performance assessment” can take on a whole new meaning in a circus arts unit!

Creating rubrics for circus skills is straightforward, and can be based on a system of benchmarks created for each skill taught in a unit. For juggling, 30 consecutive throws with three objects could represent mastery. The level below could be 15 throws, and so on. The object is for students to achieve the highest possible benchmark in as many skill areas as possible.

An interesting feature of this assessment system is that it allows students to achieve “benchmarks within benchmarks”. For example, a student could be checked off for juggling scarves up to 30 throws, and later achieve the same benchmark with balls, rings or pins. This system provides a differentiated assessment for students at varying skill levels.

### SAMPLE ASSESSMENT FORM

<i>NAME</i>	<i>JUGGLING</i> <i>15x</i>	<i>JUGGLING</i> <i>30x</i>	<i>JUGGLING</i> <i>100 throw</i> <i>club</i>	<i>STICKS</i> <i>30 secs</i>	<i>PLATE</i> <i>3</i> <i>starts</i>	<i>DIABOLO</i> <i>30 secs</i>	<i>TRICKS</i> <i>3</i>
J. Doe	S, B, R, P	S, B, R	S, B	✓		✓	
A. Smith	S, B, R	S, B	S	✓	✓		✓

S = Scarves    B = Beanbags    R = Rings    P = Pins

## **UNIVERSITY LEVEL**

A number of colleges and universities have ongoing and large scale circus arts programs. A few institutions put on a circus each year, complete with aerial acts and a big top! A more immediate option is to offer circus arts as an activity course through the Physical Education or Recreation departments.

The scope of the course is dependent upon available equipment. It is possible to adequately equip classes of up to 25 students with an expenditure of approximately \$1000 - \$1500.

Circus arts courses can be conducted in many kinds of facilities - gymnasiums, dance studios, wrestling rooms, and even outdoors. Instructional space is an issue at many institutions, and flexibility may help sell administrators on the course.

## SAMPLE UNIVERSITY LEVEL COURSE SYLLABUS:

### CIRCUS ARTS 101

Instructor: Jason Catanzariti

#### Course Objectives

Introduce participants to a variety of circus skills.

Create an environment conducive to steady and meaningful practice to facilitate skill development.

Give students the opportunity to perform for an audience.

#### Subject Matter

The class will focus on (but not be limited to) four types of skills:

Juggling with various objects, individually and with a partner.

Manipulation including devil sticks, spinning plates, diabolos, and cups.

Balancing objects such as peacock feathers and wands.

Apparatus including unicycles and balance boards.

#### Evaluation

Attendance & Participation	60%
Practice Journal	20%
Skills Test	20%
Performance (optional)	Skills test waived

#### Skills Tests

Each student will select one skill from each of the four subject areas on which to be tested.

##### Juggling

Balls:	30 throws
Rings:	15 throws
Clubs:	10 throws

##### Manipulative

Devil Sticks:	10 seconds + one trick
Spinning Plate:	5 starts + one trick
Diabolo:	20 seconds + one trick

##### Balance

Feather:	10 seconds
Wand:	5 seconds

##### Apparatus

Rola-Bola:	10 seconds
Unicycle:	15' without spotter

## **CHAPTER VIII**

### **PUTTING ON A STUDENT CIRCUS**



Some schools present culminating events at the conclusion of circus units to showcase students' skills. These events give students a chance to, experience the creation and presentation of a performance for an audience. Parents love to see their kids showing off hard-earned skills. This makes culminating event programs valuable public relations tools, as well as unforgettable educational experiences.

Performances also allow for interdisciplinary connections between academic subject areas. One strategy is to involve the various subject area teachers in organizing various components of a student performance. A music teacher may be in charge of obtaining background music for the circus acts, organizing a "clown chorus", or even a full-scale circus band. An art teacher may be involved in creating costumes, scenery, and clown faces.

During preparation for culminating event programs, classroom teachers may incorporate circus themes into their curricular work. The history of the circus in America or other countries can be explored. The physics of aerial stunts can be used as examples in science. Music teachers can introduce their classes to traditional circus music, such as from a "calliope".

The first section of this chapter discusses how to create and choreograph acts. The second section describes how to structure rehearsal time prior to the performance, and the final section deals with logistical concerns for the actual presentation of the show.

## CREATING THE ACTS



*Keep it simple.*

Each act should showcase the students and their skills, but not be too complicated. Precision choreography and intensive rehearsal of non-skill elements should be avoided. Simple thematics can be used - students in the plate spinning act could be dressed as waiters. The scarf-juggling act could have ballet music playing in the background, etc.

*Each act should have a beginning, a middle, and an end.*

This can be as simple as introducing the act and having the music start, having the group enter the stage, perform their skills together, take turns performing individual skills, take a group bow, and leave the stage.

*Make sure that all students have their “moment in the spotlight”.*

Every student should experience success on stage - it is the director's responsibility to structure the acts accordingly. Student performers should always leave the stage a hero.

During the performance, call out the students' names as they execute their best moves, and encourage the audience to give them a round of applause. Have the whole group take a bow at the end of each act.

*Standardize common aspects of each act.*

This reduces the need to remember many complicated details of each act. Teach the entire cast how to take a bow individually, and as a group at the end of each act. “Captains” can be assigned to call out cues for group movements and bows.

*Avoid choreographing tricks or moves that must be performed “on cue”.*

Students should not feel more pressured than necessary during the performance. It is a good policy to use music as background rather than linking moves and tricks to specific points in the music.

It is also a good idea to use music that will not run out during the act. Loop together several songs if necessary - there are few things worse than having the music run out and leaving the performers on stage in an awkward silence.

*Do not allow students to overextend themselves by attempting to perform tricks that they cannot execute consistently.*

Kids are always excited about performing, but they tend to get a bit nervous just before show time. They feel better knowing they can perform their skills well, and will not be overextending themselves by attempting their hardest stunts on stage. During rehearsals, tell students to plan on performing only those tricks and moves that they can do perfectly at least five times in a row during practice.

*Let students know that it’s OK if they drop a ball or miss a trick on stage.*

Kids always asks, “What if we drop a ball during the show?” With a smile, tell them, “It will probably hit the ground. Then you can pick it up and try again!” The best jugglers in the world drop every so often – then they pick it up and continue the performance.

Audiences (especially parents) are very forgiving when a student drops, and will often cheer them on to try again until they successfully complete the trick. In juggling acts, use beanbags if possible for easy recovery from drops.

*Plan on directing the acts from onstage or from the side.*

It is a good idea to be nearby during the act to give encouragement and instructions to the performers. Have a microphone if you find it necessary to speak to the audience, perhaps to have them encourage the performer to try a trick again after a miscue.

*Designate a ringmaster.*

The ringmaster can be a student, two students sharing the task, or an adult. The ringmaster should be distinctly dressed and have their announcements written down in advance. Student ringmasters should be coached in speaking in a loud and clear voice, and in using a microphone.

The ringmasters should ask the audience to give a round of applause at the beginning and end of each act. They can also fill time in between while equipment is set up for the next act with jokes or announcements.



## STRUCTURING REHEARSAL TIME

*Spend the first few days simply developing skills.*

Rather than having students decide what acts to be in before handling any equipment, devote a few sessions to open practice in which students are encouraged to experiment with all the available equipment. During these sessions, begin signing up students for particular acts according to their interest and ability. Some students will need guidance and reassurance if they are not confident in their skills. Teachers may also decide on skill requirements for an act – “To be in the juggling act, you must be able to make ten throws in a row without missing.”

*What if a student really wants to be in an act, but isn't very good at it? What if a student isn't good at ANY of the skills?*

Most students just need some extra attention and a pat on the back. The teacher should try to reassure these students, and urge them to choose a skill and get as good at it as possible. The purpose of putting on a show is to include everyone in a non-competitive activity that requires teamwork. In other words, everyone is important to the show, and no one gets left out. Reassure these students that the point of the show is to do your best - not to be a professional juggler or unicyclist. Although scarf juggling and balancing acts should not be looked upon as “second string” acts, they are sometimes good options for students who are less than confident in the other skills.

Students who display a clear desire to be in an act because they enjoy that particular skill should be allowed to join it - even if they aren't especially skillful. Since they are interested, they will probably put in extra practice. Audiences often recognize the perseverance of such students on stage, and are quite supportive.

*When students are signed up in their acts, schedule rehearsal times for each group.*

Out of necessity, rehearsal times for each act must often occur during group rehearsals. If this is the case, set aside an area of the practice room just for working on acts. It is helpful to pretend this space is the actual performance area - use consistent directions for facing the audience and for entering and leaving the performing area. This will greatly simplify matters when the time comes for rehearsals at the performance site.

*If the performance venue is different than the practice site, schedule at least one dress rehearsal there if possible.*

It isn't always possible to rehearse at the performance site, but it is helpful for showing the students what to expect. At least visit the site so you know how big the performing space will be, and where the audience will be seated. Use this information to structure rehearsals.

Another helpful strategy is to orient the rehearsal space to match the performance site - in other words, use one wall to simulate the audience, and practice the acts facing that direction. This procedure may prevent confusion when the time comes to perform at the site.

## THE PERFORMANCE

*Arrange for students to sit where they can view the performance, rather than having them wait backstage where they are unable to see what is happening.*

Students should be able to see each other perform and cheer on the other acts. If made to wait backstage, students often become anxious and overexcited, and make noise that can detract from what is happening on stage. If it is necessary to have students in a backstage area, be sure they are supervised.

*Have a plan for how students will get their equipment, enter and exit the performing area, and put away their equipment when finished with their act.*

Easy on / off transitions should be planned in advance. For example, two acts that have lots of equipment to set up and remove should not follow each other in the program.

One way to standardize transitions is to use a “circle system”. In this scheme one side of the stage is always the entrance, the other side is always the exit. The students are seated next to the stage in the order of their acts. Each act sits in a separate single-file line on the entrance side of the stage. During the show, while one act is on stage performing, the next leaves their seats. They go backstage, get their equipment, and prepare to go on stage. When they make their entrance, the previous act is backstage putting away their equipment, having exited the stage on the other side. This system ensures that only one group of students is backstage at a time, thereby decreasing backstage traffic during the performance. Equipment management is also simplified.

*Arrange to use a sound system that is loud enough for the performance area, can play your CD's or MP3 device, and has at least one microphone.*

A volunteer in charge of turning the music on and off is very helpful. This person should meet with the ringmaster to go over the start / stop cues for each piece of music. A show order and list of songs for each act should be posted at the sound technician's table.

*Write down the show order, make copies, and post them conspicuously.*

Teachers and supervisors should keep a show order with them for quick reference during the show. This is basic stagecraft, and it's very important.

*Decorate the performing area, but avoid easily breakable scenery and obstacles that could interfere with acts.*

Errant juggling balls and diabolos have taken down many beautiful, but poorly placed decorations. Beware of low-hanging mobiles, anything that can be knocked over, or otherwise damaged by out-of-control props or performers.

Some ideas for decorations: A circus ring curb made from wrapped shoe boxes, a parachute hung over the audience to create a "circus tent", or student-created clown face murals hung on the walls.

## **APPENDIX A - TEACHER RESOURCES**

### ***BOOKS***

Besmehn, B. (1994). Juggling Step by Step. New York: Sterling Publishing Co.

Bolton, R. (1982). Circus in a Suitcase. Rowayton, CT: New Plays Incorporated.

Cassidy, J., & Rimbeaux, B. C. (1977). Juggling for the Complete Klutz. Palo Alto, CA: Klutz.

Cohen, S. (1982). Just Juggle. New York: McGraw-Hill Book Co.

Darbyshire, L., & Siddell, J. (1993). Juggling. Philadelphia, PA: Courage Books.

Finnigan, D. (1987). The Complete Juggler. New York: Vintage Books.

Hoher, S. (1994) Unicycling - From Beginner to Expert. Bath, England: Butterfingers.

### ***ORGANIZATIONS***

American Youth Circus Organization  
[www.americanyouthcircus.org/](http://www.americanyouthcircus.org/)

International Juggler's Association  
[www.juggle.org](http://www.juggle.org)

The National Circus Project  
[www.nationalcircusproject.com](http://www.nationalcircusproject.com)

The Unicycling Society of America  
[www.unicycling.org/usa/](http://www.unicycling.org/usa/)

## ***EQUIPMENT***

Dube Inc.  
[www.dube.com](http://www.dube.com)

Gopher Sport  
[www.gophersport.com/](http://www.gophersport.com/)

Higgins Brothers  
[www.higginsbrothers.com](http://www.higginsbrothers.com)

Sportime  
[www.sportime.com](http://www.sportime.com)

Unicycle.com  
[www.unicycle.com](http://www.unicycle.com)

## **APPENDIX B - GLOSSARY**

Arm Curl - a manipulation using a spinning object, such as a plate, ball, or tray. The object is passed under the arm, with the arm curling back over while returning the object to its original position. Can be done with the object spinning on a stick or on finger.

Balance Board - See “Rola-Bola”.

Balancing (of an external object) - dynamically keeping an object in a stable position using one point of contact without grasping. Balancing can be done using the hand, arm, foot, chin, forehead, or other body parts.

Balls - the most common type of juggling prop. There are two types of juggling balls - bouncing balls, and “dead” balls that do not bounce (these are sometimes called “stage balls”). Each is advantageous for different types of tricks and situations.

Basic Cascade - the simplest and most common pattern for juggling three objects with two hands. Each object is thrown and subsequently caught by the other hand. The resulting trajectories resemble an infinity sign.

Beanbags - juggling props that are a good choice over balls because they do not bounce away from students. Beanbags come in many shapes and designs.

Clubs: see “Pins”.

Culminating Event - a student performance or demonstration of skills and acts. Often conducted at the end of an instructional unit.

Cups - see “Nesting Cups”.

Devil Stick - a stick about three feet in length that usually has weighted objects at each end for counterbalance. It is manipulated with two smaller “handsticks”.

Diabolo - an hourglass-shaped device that spins on a string. Usually made of rubber, plastic, or wood.

Drift - a term used by Lewis (1974) to describe the tendency of novice jugglers to chase after their juggling objects.

Flash - throwing and catching each object once. A flash of three objects is three throws and catches; a flash of five objects is five throws and catches.

Giraffe Unicycle - a unicycle that is driven by a chain running from the pedals to the wheel. These vehicles can be quite tall.

Handstick - a stick which is used to either spin a plate, or manipulate a Devil Stick or diabolo. Handsticks can be made of wood or plastic, and may be treated with rubber or wrapped with tape.

Juggling - the act of continuously throwing and catching when the number of objects is greater than the number of hands being utilized. Or, the act of skillfully manipulating one or more objects.

Nesting Cups - metal cups that are manipulated by tossing and catching them inside each other.

Pattern - the pathway a group of juggling objects follows in the air. Common beginners' patterns are the Basic Cascade, Reverse Cascade, and the Shower.

Pins - juggling props usually made of plastic. They have a handle end and a larger "bell" end, are flipped when juggled, and caught on the handles. These are the most difficult of the basic juggling objects. Also known as "clubs".

Progression - a sequence of steps for learning that breaks down a skill into component parts.

Rings - thin, lightweight juggling props, typically about 12" in diameter. Students who have mastered juggling balls can usually learn to juggle with rings quickly.

Rocking - a unicycle skill used for remaining stationary, using small forward and backward movements of the wheel. This skill is also called "Idling", or "Hovering".



Rola-Bola - a balance skill comprised of a board that sits on top of a rolling cylinder.

Scarves - lightweight juggling props that move more slowly than balls, rings, or pins.

Shower Juggling - a pattern used for juggling any number of objects in a circular pattern. One hand throws continuously, while the other hand catches and quickly passes off each object to the throwing hand.

Spinning Plate - a specially designed plate, usually made of plastic or metal, with a small indentation in the bottom-center. The plate is spun on top of a stick.

Stack Pole - two or more sticks that attach at the ends. A plate or ball is spun on the top stick, which is then attached to other sticks to produce a long pole.

Standard Unicycle - a unicycle with the pedals attached to axle of the wheel.

Stilts - tall poles used for walking. Types of stilts include those which are strapped to the leg, and held in the hands. See also “Strapless Stilts”, and “Strap-On Stilts”.

Strapless Stilts - stilts that are held in the hands, and are not attached to the walker’s body. These are generally the safest stilts for institutional use.

Strap-On Stilts - stilts which are strapped to the walker’s legs. Falls from this equipment can be hazardous.

Time-on-Task - the amount of time spent by students in meaningful practice of a skill.

2 + 1 - a juggling pattern in which two balls are thrown up simultaneously, and then the third ball is thrown up in between them.

The “X” - an intermediate step in learning to juggle two objects. The first object is tossed to approximately head height. When it reaches its peak, the second object is thrown such that it crosses the first ball in the air. The resulting trajectories describe an X. The objects may or may not be caught during the execution of this skill.

## APPENDIX C - BIBLIOGRAPHY

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